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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/774,352	02/06/2004	Gerd Scharninghausen	ESN-45	5252

26875 7590 11/15/2007
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EXAMINER	
EWALD, MARIA VERONICA	
ART UNIT	**PAPER NUMBER**
1791	
MAIL DATE	**DELIVERY MODE**
11/15/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/774,352	SCHARNINGHAUSEN ET AL.	
	Examiner	Art Unit	
	Maria Veronica D. Ewald	1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *9/14/07*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-5 and 8-17* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5 and 8-17* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *23 October 2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *9/14/07*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

13. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 – 3, 8, 10, 12 – 13 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by King (U.S. 3,857,989). King teaches a portioning device for portioning a bulk material, comprising: a forming space adapted to be filled by a mass of bulk material (item 27 – figure 1), the forming space bounded by a wall for forming the mass, the wall including a slit and an output opening (figure 1); and a cutting device for portioning the mass filled into the forming space into a plurality of mass portions, the cutting device having a cutter that is at least partially introducible through the slit into the forming space (items 28 and 29 – figure 1; column 3, lines 49 – 51), and each of the plurality of mass portions being output from the forming space through the output opening (item 27 – figure 1), wherein the slit extends far enough through the wall so that the cutter can cut completely through a cross section of the forming space (figure 1); wherein the cutting device is introducible into the forming space in a direction that lies approximately perpendicular to the direction in which the mass is filled into the forming space (figure 1); wherein the forming space has a filling opening (item 26 – figure 1), through which the mass can be filled into the forming space.

With respect to claims 8, 10 and 12, King further teaches that the cutter is introducible into the forming space at a place such that each of the plurality of mass portions formed, when the cutter is introduced, is supported by at least part of the wall (figure 1); wherein the wall is substantially cylindrical (item 27 – figure 1) and the slit almost completely penetrates the wall (figure 1); wherein there are means for fastening the cutting device as an attachment to a device for transporting and/or mincing bulk material (column 3, lines 55 – 60).

With respect to claims 13 and 15, the reference also teaches a device for transporting and/or mincing bulk material, comprising: a forming space adapted to be filled by a mass of bulk material (item 27 – figure 1), the forming space bounded by a wall for forming the mass, the wall including a slit and an output opening (figure 1); and a cutting device for portioning the mass filled into the forming space into a plurality of mass portions, the cutting device having a cutter that can be introduced through the slit at least partially into the forming space (items 28 and 29 – figure 1; column 3, lines 49 – 51), and each of the plurality of mass portions being output from the forming space through the output opening (item 27 – figure 1), wherein the slit extends far enough through the wall so that the cutter can cut completely through a cross section of the forming space (figure 1); wherein there are means for transporting the mass, the means of transport being discontinuously operable, and the timing of the discontinuous operation cooperating with the introductory motion of the cutter into the forming space for portioning the mass into the plurality of mass portions (column 3, lines 55 – 60).

Claims 1 – 3, 8, 10, 12 – 13 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Kobayashi (U.S. 5,004,619). Kobayashi teaches a portioning device for portioning a bulk material, comprising: a forming space adapted to be filled by a mass of bulk material (item 23 – figure 3), the forming space bounded by a wall for forming the mass, the wall including a slit and an output opening (figure 3); and a cutting device for portioning the mass filled into the forming space into a plurality of mass portions, the cutting device having a cutter that is at least partially introducible through the slit into the forming space (item 3 – figure 3; column 3, lines 50 – 55), and each of the plurality of mass portions being output from the forming space through the output opening (item 21 – figure 3), wherein the slit extends far enough through the wall so that the cutter can cut completely through a cross section of the forming space (figure 3); wherein the cutting device is introducible into the forming space in a direction that lies approximately perpendicular to the direction in which the mass is filled into the forming space (figure 3); wherein the forming space has a filling opening (item 14 – figure 3), through which the mass can be filled into the forming space (figure 3).

With respect to claims 8, 10 and 12, Kobayashi further teaches that the cutter is introducible into the forming space at a place such that each of the plurality of mass portions formed, when the cutter is introduced, is supported by at least part of the wall (figure 3); wherein the wall is substantially cylindrical (figure 3) and the slit almost completely penetrates the wall (figure 3); wherein there are means for fastening the cutting device as an attachment to a device for transporting and/or mincing bulk material (column 3, lines 50 – 60).

With respect to claims 13 and 15, the reference also teaches a device for transporting and/or mincing bulk material, comprising: a forming space adapted to be filled by a mass of bulk material (item 23 – figure 3), the forming space bounded by a wall for forming the mass, the wall including a slit and an output opening (figure 3); and a cutting device for portioning the mass filled into the forming space into a plurality of mass portions, the cutting device having a cutter that can be introduced through the slit at least partially into the forming space (item 3 – figure 3; column 3, lines 50 – 55), and each of the plurality of mass portions being output from the forming space through the output opening (item 21 – figure 1), wherein the slit extends far enough through the wall so that the cutter can cut completely through a cross section of the forming space (figure 3); wherein there are means for transporting the mass, the means of transport being discontinuously operable, and the timing of the discontinuous operation cooperating with the introductory motion of the cutter into the forming space for portioning the mass into the plurality of mass portions (column 4, lines 1 – 40; column 5, lines 1 – 30).

Claims 1 – 5, 8 – 10, 12 – 13 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Volkl (U.S. 6,390,799). Volkl teaches a portioning device for portioning a bulk material, comprising: a forming space adapted to be filled by a mass of the bulk material, the forming space (item 53 – figure 3) bounded by a wall (figure 3) for forming the mass, the wall including a slit and an output opening (item 63 – figure 3); and a cutting device for portioning the mass filled into the forming space into a plurality

of mass portions (item 65 – figure 3), the cutting device having a cutter that is at least partially introducible through the slit (figure 3) into the forming space, and each of the plurality of mass portions being output from the forming space through the output opening; wherein the slit extends far enough through the wall so that the cutter can cut completely through a cross section of the forming space (figure 3; column 6, lines 29 – 35); wherein the cutting device is introducible into the forming space in a direction that lies approximately perpendicular to the direction in which the mass is filled into the forming space (figure 3); wherein the forming space has a filling opening through which the mass can be filled into the forming space (item 57 – figure 3); wherein the forming space has a geometry matched to the form of an end product (column 4, lines 1 – 15); wherein the forming space is defined inside a tube (item 53 – figure 3) through which the mass is axially transportable (figure 3).

With respect to claims 8 – 10, 12 and 17, the reference also teaches that the cutter is introducible into the forming space at a place such that each of the plurality of mass portions formed, when the cutter is introduced, is supported by at least part of the wall (figure 3); wherein the slit is spaced apart at a distance from an output opening of the forming space such that a section of the forming space corresponds at least approximately to the size of each of the plurality of mass portions (figure 3); wherein the wall is substantially cylindrical and the slit almost completely penetrates the wall (figure 3); wherein there are means for fastening the cutting device as an attachment to a device for transporting and/or mincing bulk material (figure 1; column 1, lines 15 – 25;

column 4, lines 60 – 67); wherein the geometry has a cross section that is oval (column 4, lines 1 – 5).

With respect to claims 13 and 15, Volkl teaches a device for transporting and/or mincing bulk material, comprising: a forming space adapted to be filled by a mass of the bulk material, the forming space bounded by a wall (item 53 – figure 3) for forming the mass, the wall including a slit and an output opening (item 63 – figure 3); and a cutting device for portioning the mass filled into the forming space into a plurality of mass portions (item 65 – figure 3), the cutting device having a cutter that can be introduced through the slit at least partially into the forming space, and each of the plurality of mass portions being output from the forming space through the output opening (figure 3); wherein the slit extends far enough through the wall so that the cutter can cut completely through the cross section of the forming space (figure 3); wherein there are means for transporting the mass, the means for transport being discontinuously operable, and the timing of the discontinuous operation cooperating with the introductory motion of the cutter into the forming space for portioning the mass into the plurality of mass portions (column 6, lines 29 – 44).

Claims 1 – 5, 8 – 10, 12 – 13 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Rosenstone, et al. (U.S. 2,101,755). Rosenstone, et al. teach a portioning device for portioning a bulk material, comprising: a forming space adapted to be filled by a mass of the bulk material, the forming space (figure 1; column 1, lines 30 – 40) bounded by a wall (figure 1) for forming the mass, the wall including a slit and an

output opening (figure 1); and a cutting device for portioning the mass filled into the forming space into a plurality of mass portions (item 16 – figure 1), the cutting device having a cutter that is at least partially introducible through the slit (figure 1) into the forming space, and each of the plurality of mass portions being output from the forming space through the output opening; wherein the slit extends far enough through the wall so that the cutter can cut completely through a cross section of the forming space (figure 1); wherein the cutting device is introducible into the forming space in a direction that lies approximately perpendicular to the direction in which the mass is filled into the forming space (figure 1); wherein the forming space has a filling opening through which the mass can be filled into the forming space (column 2, lines 28 – 30); wherein the forming space has a geometry matched to the form of an end product (figure 1); wherein the forming space is defined inside a tube (item 7 – figure 1) through which the mass is axially transportable (figure 1).

With respect to claims 8 – 10, 12 and 16, the reference also teaches that the cutter is introducible into the forming space at a place such that each of the plurality of mass portions formed, when the cutter is introduced, is supported by at least part of the wall (figure 1); wherein the slit is spaced apart at a distance from an output opening of the forming space such that a section of the forming space corresponds at least approximately to the size of each of the plurality of mass portions (figure 1); wherein the wall is substantially cylindrical and the slit almost completely penetrates the wall (figure 1); wherein there are means for fastening the cutting device as an attachment to a device for transporting and/or mincing bulk material (figure 1; column 1, 40 – 55; column

2, lines 1 – 20); wherein the geometry has a cross section that is substantially rotationally symmetrical (figures 1 and 2).

With respect to claim 13, Rosenstone, et al. teach a device for transporting and/or mincing bulk material, comprising: a forming space adapted to be filled by a mass of the bulk material, the forming space bounded by a wall (figure 1) for forming the mass, the wall including a slit and an output opening (figure 1); and a cutting device for portioning the mass filled into the forming space into a plurality of mass portions (item 16 – figure 1), the cutting device having a cutter that can be introduced through the slit at least partially into the forming space, and each of the plurality of mass portions being output from the forming space through the output opening (figure 1); wherein the slit extends far enough through the wall so that the cutter can cut completely through the cross section of the forming space (figure 1).

Claims 1 – 5, 8 – 13 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Ackerman (U.S. 2,500,973). Ackerman teach a portioning device for portioning a bulk material, comprising: a forming space adapted to be filled by a mass of the bulk material, the forming space (figure 1) bounded by a wall (figure 1) for forming the mass, the wall including a slit and an output opening (figure 1); and a cutting device for portioning the mass filled into the forming space into a plurality of mass portions (items 22 and 24 – figures 6 and 7), the cutting device having a cutter that is at least partially introducible through the slit (figures 1, 6 and 7) into the forming space, and each of the plurality of mass portions being output from the forming space through the

output opening; wherein the slit extends far enough through the wall so that the cutter can cut completely through a cross section of the forming space (figure 1); wherein the cutting device is introducible into the forming space in a direction that lies approximately perpendicular to the direction in which the mass is filled into the forming space (figure 1); wherein the forming space has a filling opening through which the mass can be filled into the forming space (figure 1); wherein the forming space has a geometry matched to the form of an end product (figure 1); wherein the forming space is defined inside a tube (item 10 – figure 1) through which the mass is axially transportable (figure 1).

With respect to claims 8 – 12 and 16, the reference also teaches that the cutter is introducible into the forming space at a place such that each of the plurality of mass portions formed, when the cutter is introduced, is supported by at least part of the wall (figure 1); wherein the slit is spaced apart at a distance from an output opening of the forming space such that a section of the forming space corresponds at least approximately to the size of each of the plurality of mass portions (figure 1); wherein the wall is substantially cylindrical and the slit almost completely penetrates the wall (figure 1); wherein the cutter is a two-bladed, rotatable cutting knife (items 22 and 24 – figures 4 and 5; column 3, lines 20 – 65); wherein there are means for fastening the cutting device as an attachment to a device for transporting and/or mincing bulk material (figure 1; column 3, lines 1 – 30); wherein the geometry has a cross section that is substantially rotationally symmetrical (figures 1 and 4 – 5).

With respect to claim 13, Ackerman teaches a device for transporting and/or mincing bulk material, comprising: a forming space adapted to be filled by a mass of the

bulk material, the forming space bounded by a wall (figure 1) for forming the mass, the wall including a slit and an output opening (figure 1); and a cutting device for portioning the mass filled into the forming space into a plurality of mass portions (item 22 and 24 – figures 1 and 4 – 5), the cutting device having a cutter that can be introduced through the slit at least partially into the forming space, and each of the plurality of mass portions being output from the forming space through the output opening (figure 1); wherein the slit extends far enough through the wall so that the cutter can cut completely through the cross section of the forming space (figure 1).

Claim Rejections - 35 USC § 103

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over King in view of Bortone, et al. (U.S. 6,797,213). King teaches the characteristics previously described but does not teach that the cutter is a rotating two-bladed knife.

In a method to sever extruded puff pastry pieces, Bortone, et al. teach the use of a rotating two-bladed cutting device mounted on shaft (item 72 – figures 10a and 10b). The rotating pair of paddles nicks the extruded pastry dough to form a plurality of curly pieces. Thus, using a two-bladed paddle cuts more dough in less time, thereby increasing production.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the Applicant's invention to modify the rotating blade of King such that a pair of rotating paddles are used for the purpose of cutting multiple pieces of food in less time, thereby increasing production.

Claims 11 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Volkl. Volkl teaches the characteristics previously described but do not specifically teach that the cutter is a rotating two-bladed knife and that the geometry is substantially cylindrical and symmetrical.

However, Volkl does teach that the cutting device can be modified and altered depending on the user's preference. For example, Volkl teaches that it is possible to use a disk-like cutting device, wherein a continuous rotary movement of the cutting device portions the meat (column 4, lines 45 – 60). Furthermore, Volkl teaches that the geometry of the forming tube can be modified also depending on the user's preference. The shaping tube can be configured with a different cross section (column 7, lines 1 – 5).

Thus, it would have been obvious to one of ordinary skill in the art at the time of the Applicant's invention to modify the apparatus of Volkl such that the cutter is a two-bladed cutter and the geometry is substantially cylindrical and symmetrical, depending on the user's preference.

Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Volkl in view of Abler (U.S. 5,230,267). Volkl teaches the characteristics previously described but do not specifically teach that there is a smoothing belt and a shaping surface. It is noted, however, that Volkl teaches that subsequent to shaping and cutting, the formed meat patties can be passed to a delivery station such as a conveyor belt, by its own weight or by an additional ejector device (column 6, lines 35 – 38).

In a method to form and subsequently process meat or other food slices, Abler teaches the use of a smoothing belt used in conjunction with a conveyor (items 15 and 16 – figure 1). The smoothing belt functions to uncurl or ensure that the slices remain flat as they are transported on the conveyor.

Thus, it would have been obvious to one of ordinary skill in the art at the time of the Applicant's invention to configure the apparatus of Volkl with a conveyor belt and smoothing surface as taught by Abler, for the purpose of conveying the meat patties to its final processing station, while at the same time, ensuring that the surface of the patties retain their flat shape or final shape.

Response to Arguments

15. Applicant's arguments filed September 14, 2007 have been fully considered but they are not persuasive with respect to the references of King and Kobayashi. However, with respect to the references of Stahl and Abler, such arguments have been considered and found persuasive. Thus, the rejections with respect to the latter two references have been withdrawn. In addition, the Examiner has cited the additional

references of Volkl, Rosenstone, et al. and Ackerman, which the Examiner believes anticipates the claims.

With respect to the reference of King, Applicant has argued that the chute does not define the final form of the product and thus, Applicant has argued that the chute is not a forming space. Though the chute may not define the final form of the product – that feature is not claimed in claim 1. The geometry of the forming space as it defines the end product form is not introduced until claim 4. Furthermore, there is no indication anywhere in claim 1 that the forming space defines the final form of the end product; it is merely indicated as a forming space. Broadly interpreted, a forming space can limit or delineate the form of a product, without rendering the product its final shape. Furthermore, any meat products placed into the chute of King are limited by the bounds of the chute itself and thus, the chute can be identified as a forming space.

With respect to the reference of Kobayashi, Applicant has argued that core S is already in its final shape before any interaction with the gate. Though true, the gate provides the final form to the mass P, which covers the core. Furthermore, even if the gate serves to start and stop the supply of mass P, the mass is still cut such that individual covered globs are produced.

The Examiner has also cited the references of Volkl, Rosenstone, et al. and Ackerman. With respect to the reference of Volkl, Volkl teaches a forming space bounded by a wall, such wall formed by the clamping of the shaping tube (item 53 – figure 3) to the calibration plate (item 47 – figure 3). This creates a surface into which a blade (item 65 – figure 3) is introduced into the forming space to cut and form meat

patties of a cylindrical shape. Similarly, Rosenstone, et al. teach a forming space bounded by a wall, such wall formed by the lower flanges (items 9 and 10 – figure 1), into which a blade is introduced through a slit, which cuts and forms meat into individual patties. Ackerman also teaches a forming space bounded by a wall, such wall formed by two plates clamped securely to each other (items 14 and 30 – figure 1), into which a blade is introduced through a slit, which also cuts and forms meat into individual patties.

Conclusion

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Maria Veronica D. Ewald whose telephone number is 571-272-8519. The examiner can normally be reached on M-F, 8 - 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Yogendra Gupta can be reached on 571-272-1316. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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